

PROPOSED USE OF THE PLENARY POWERS (A) TO DESIGNATE A TYPE-SPECIES FOR THE GENERA *PSEUDOSQUILLA* DANA, 1852, AND *GONODACTYLUS* BERTHOLD, 1827, AND (B) FOR THE SUPPRESSION OF THE GENERIC NAME *SMERDIS* LEACH, 1817 (CRUSTACEA, STOMATOPODA). Z.N.(S.) 1609

By L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) and Raymond B. Manning¹ (*Division of Marine Invertebrates, U.S. National Museum, Washington, D.C., U.S.A.*)

A recent revision of the genera of Stomatopoda brought to light that a strict application of the International Code of Zoological Nomenclature in three instances would lead to serious confusion. The three genera involved are *Pseudosquilla* Dana, 1852, *Gonodactylus* Berthold, 1827, and *Smerdis* Leach, 1817. In order to legalize the currently accepted names in their currently accepted sense, the Commission is asked here to make use of their plenary powers in these three cases. This opportunity is taken also to place the names of three other genera of Stomatopoda on the Official List of Generic Names in Zoology. All three of these names were published more than 60 years ago; as far as we can determine they are the oldest available names for the taxa to which they have been given and are not preoccupied by older homonyms.

2. The generic name *Pseudosquilla* Dana, 1852, has been used until very recently for a rather heterogenous group of Stomatopoda. It was Serène (1962, *Bull. Inst. océanogr. Monaco* 1241 : 1-27) who first separated this group into a number of more homogeneous components. Serène considered "Guérin, in Eydoux et Souleyet 1841" to be the author of the generic name *Pseudosquilla* and he indicated as the type of that genus *Squilla ciliata* Fabricius, 1787. Serène, however, was mistaken as in Eydoux & Souleyet's (1841, *Voy. autour du monde La Bonite* (Zool.) 1 (2) : 263) paper the genus was only indicated with the vernacular French name "Pseudosquille". The first use of the latin name *Pseudosquilla* was by Dana (1852, *U.S. Explor. Exped.* 13 : 621), who placed in this genus the two species *Squilla lessonii* Guérin, 1830, and *Squilla stylifera* Lamarck, 1818, without indicating a type. The first type selection for Dana's genus that we know of is by Rathbun (1926, *Bull. U.S. nat. Mus.* 138 : 137), who selected as such *Squilla lessonii* Guérin, 1830; this selection is entirely valid. In Serène's new classification the two species *Squilla lessonii* Guérin, and *Squilla stylifera* Lamarck, 1818 (the latter being a subjective junior synonym of *Squilla ciliata* Fabricius, 1787) are placed in different genera, which for convenience sake are indicated here as genus A and genus B respectively. It is to genus B that Serène (1962) gave the name *Pseudosquilla*, while according to the Code this name should be used for genus A. Genus A is relatively poorly known and contains three species, all of which are rare and seldom reported

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upon in the literature. Genus B constitutes by far the best known group of the old undivided genus *Pseudosquilla*, with 6 species, some of which are very common, with a wide distribution and repeatedly dealt with in the literature. Serène (1962) gave the new name *Pseudosquillopsis* to genus A, which actually should be known as *Pseudosquilla*. The latter name was used by Serène for genus B. For this genus two other names are available, viz., *Alimerichthus* Guérin (1855, in R. de la Sagra, *Hist. fis. polit. nat. Cuba* (8), (Atlas), Articulata, pl. 3, fig. 12) (type-species, by monotypy: *Alimerichthus cylindricus* Guérin, 1855, in R. de la Sagra, *Hist. fis. polit. nat. Cuba* (8), (Atlas), Articulata, pl. 3, fig. 12), and *Pseuderichthus* Brooks (1886, *Johns Hopk. Univ. Circ.* 5 (49) : 83), a genus originally described without any included nominal species (type-species by selection by Manning (1963, *Bull. Mar. Sci. Gulf Carib.*, 13 (2) : 310) from among the species placed in the genus by the first subsequent author (Hansen, 1895, *Ergebn. Plankton-Exped.* 2 (G) (c) : 69, 84, 86) : *Squilla ciliata* Fabricius, 1787, *Mant. Ins.* 1 : 333). Like all stomatopod generic names derived from the word *Erichthus*, *Alimerichthus* and *Pseuderichthus* have so far been used only to indicate larval stages, and their use for adults may give rise to serious confusion. Furthermore, though it is very probable that *Alimerichthus cylindricus* is the larva of *Squilla ciliata*, there is no full certainty on this point, owing to our very imperfect present knowledge of the larval development of the Stomatopoda. Summarizing we may state that in applying the Code here strictly, the well known name *Pseudosquilla* must be given a relatively little known section of the former large genus, while the name *Alimerichthus*, which so far has been used for larvae only and the identity of which is not fully certain, has to be used for the best known and largest section of the old genus *Pseudosquilla*. The use of the plenary powers to designate *Squilla ciliata* as the type-species of the genus *Pseudosquilla* would solve the problem very easily. In that case the name *Pseudosquilla* can be used in the sense proposed by Serène (1962) for genus B, which is formed from the largest and best known part of the old genus, while the name *Pseudosquillopsis* then would become available for genus A; furthermore the "larval" names *Alimerichthus* and *Pseuderichthus* will then disappear in the synonymy of *Pseudosquilla*, and so become harmless. It is this solution that we now submit for approval to the Commission.

This nomenclatural problem is further confused by the fact that the two names listed immediately below are junior homonyms that have been applied to larval forms (*Alimerichthus* Claus) and a fossil form (*Pseuderichthus* Dames). The Commission is requested to place these names on the Official Index of Rejected and Invalid Names in Zoology. The names in question are: *Alimerichthus* Claus (1871, *Abh. Ges. Wiss. Göttingen* 16 : 146), a genus originally described without any included nominal species (type-species by present selection from among the species placed in the genus by the first subsequent author (Lanchester, 1903, in Gardiner, J. S., *Fauna and Geography of the Maldive and Laccadive Archipelagoes* 1 (4) : 457, 458); *Alimerichthus pyramidalis* Lanchester, 1903, in Gardiner, J. S., *loc. cit.* : 457 which is an invalid junior homonym of *Alimerichthus* Guérin, 1855; and *Pseuderichthus* Dames (1886, *Zeitschr. Deutsch. geol. Ges.* 38 : 571) (published after September, 1886) (type-species, by monotypy, *Pseuderichthus cretaceus* Dames, 1886, *Zeitschr. Deutsch.*

geol. Ges. 38 : 571) which is an invalid junior homonym of *Pseuderichthys* Brooks, 1886 (May).

The name *Pseuderichthys* was introduced into the literature on three separate occasions in 1886. Brooks, in a summary of his "Challenger" report, first published the name in May, 1886 in the Johns Hopkins University Circulars. Brooks again introduced the name sometime after August, 1886, in the "Challenger" report proper. Dames independently introduced the name sometime after September, 1886. The first use of the name by Brooks, of course, has priority.

3. The second problem is somewhat similar. Berthold (1827, Latreille's *Naturl. Fam. Thierr.* : 271) in the original description of the genus *Gonodactylus* stated: "Das Geschlecht *Gonodactylus* ist mit *Squilla Chiragra* und *Squilla Scyllarus* gebildet". No type-species was indicated by Berthold. The first type selection for *Gonodactylus* known to us is the one by H. Milne Edwards (1837, Cuvier's *Règne Anim.* (ed. 4) (=Discip. ed.) 18 : pl. 55) who figured as the type-species of the genus *Gonodactylus* the species *Cancer scyllarus* Linnaeus, 1758. In view of the fact that this is one of the two species mentioned by Berthold (1827), his type selection is entirely valid. It is most unfortunate, however, as at present *Squilla chiragra* Fabricius, 1781, and *Cancer scyllarus* Linnaeus, 1758, are considered to belong to two different genera, and the name *Gonodactylus* is currently in use for the genus containing *Squilla chiragra*. *Cancer scyllarus*, on the other hand, is the type-species of the genus *Odontodactylus* Bigelow, 1893, which in Opinion 295 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 8 (12) : 155-166) was placed under the plenary powers of the Commission on the Official List under no. 731.

As the genus to which *Squilla chiragra* belongs is found throughout the tropics of practically the entire world, is extremely common where it occurs, and after being separated from *Squilla* has been known only under the name *Gonodactylus*, no other name being available for it, it would be extremely awkward for the name *Gonodactylus* to be dropped and a new name proposed for the genus. On the other hand, the name *Gonodactylus* has never been used for the genus *Odontodactylus* by any carcinologist who recognized *Cancer scyllarus* and *Squilla chiragra* as belonging to different genera. The fact that the name *Odontodactylus* was placed on the Official List under the plenary powers of the Commission would necessitate the suppression of the name *Gonodactylus* in order to save *Odontodactylus*. The best solution for this problem is quite simple: if, under the plenary powers of the Commission, *Squilla chiragra* Fabricius, 1781, is indicated to be the type-species of the genus *Gonodactylus* Berthold, the latter name can be used in its currently adopted sense, while the generic name *Odontodactylus* also remains available.

4. The third problem concerns the generic name *Smerdis* Leach, 1817. This genus was erected for two species: *Smerdis armata* Leach, 1817, and *Smerdis vulgaris* Leach, 1817; so far as is known to us no type-species has ever been selected for the genus. Both species are based on larval stages; *Smerdis armata*, according to the most current opinion, is probably the larva of *Coronida bradyi* (A. Milne Edwards, 1869), while *Smerdis vulgaris* in all probability is the larva of *Lysiosquilla scabricauda* (Lamarck, 1818). To conform to

Recommendation 69B (5) of the International Code of Zoological Nomenclature, *Smerdis vulgaris* Leach is here selected as the type-species of the genus *Smerdis*. Hereby the name *Smerdis* Leach, 1817, becomes a subjective senior synonym of *Lysiosquilla* Dana, 1852, a name placed under the plenary powers of the Commission on the Official List in Opinion 294 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 8 (11) : 143–154). The Commission is now requested again to make use of its plenary powers and suppress the name *Smerdis* so as to validate the name *Lysiosquilla*.

5. The date and place of the original publication of the generic name *Smerdis* has been cited differently by different authors. In Neave's 1940 "Nomenclator Zoologicus" (4 : 213) this generic name is cited as "*Smerdis* Leach, 1816, Journ. Physique, 86, 305". The genus (as well as the genus *Alima*) is indeed described by Leach on p. 305 (and the genus *Phyllosoma* on p. 306) of vol. 86 of Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts, but this part of the journal is that for "Avril an 1818" as is very clearly indicated on p. 253 and also on pp. 301 and 309. The description of *Smerdis* was also published by Leach on p. 415 (and those of *Alima* and *Phyllosoma* on p. 416) of Appendix IV to J. K. Tuckey's "Narrative of an Expedition to explore the River Zaire, usually called the Congo, in South Africa, in 1816", which, as indicated on the title page was likewise published in 1818. The three genera, however, are also figured and named on an un-numbered plate in Tuckey's book. On this plate both *Smerdis armata* and *S. vulgaris* are shown and their names are given. On the bottom of this plate is printed "Published Novr. 1st, 1817, by John Murray, London". As there is no indication that this statement is incorrect, 1 November 1817 thus must be accepted as the correct date of publication of the generic names *Smerdis*, *Alima*, and *Phyllosoma* as well as that of the names of the new species figured there. The generic name *Phyllosoma* Leach, placed on the Official Index of Rejected and Invalid Generic Names in Zoology as name no. 1144 in Opinion 507 (1958, *Ops. Decls. int. Comm. zool. Nomencl.* 18 (10) : 200), also is incorrectly cited there. The entry in the Index should be changed to: *Phyllosoma* Leach, 1817, Tuckey's Narrative Exped. River Zaire (app. 4): unnumbered pl. (type-species, by selection by Holthuis, 1956, *Bull. zool. Nomencl.* 12 : 55, *Phyllosoma commune* Leach, 1817, Tuckey's Narrative Exped. River Zaire (app. 4) : unnumbered pl.).

6. Some problems arise also with the generic name *Coronis* Desmarest, 1823, which is requested here to be placed on the Official List. *Coronis* Desmarest (1823, *Dict. Sci. nat.* 28 : 345) is a homonym of *Coronis* Huebner (1823, *Verz. bekannt. Schmett.* (17) : 265). Since the two names were published in the same year, it is important for the establishment of their relative priority to know their dates of publication more exactly. According to Sherborn (1922, *Index Anim.* (1) : xliv), volume 28 of the Dictionnaire des Sciences Naturelles was published in September 1823, while Hemming (1937, *Huebner* 1 : 488–517) made clear that the part 17 of Huebner's work was published on or before 21 December 1823. The present state of our knowledge of the publication dates of these two names indicates that *Coronis* Desmarest has priority over *Coronis* Huebner. Therefore we request the Commission to place the former of these two names on the Official List, the latter on the

Official Index. The genus *Coronis* Desmarest was originally described without included nominal species. Desmarest (1823), it is true, stated in his description "il est vraisemblable que la squille pieuse, *squilla eusebia*, de M. Risso, Crust., pag. 115, appartient a ce genre", but he did not positively assign Risso's species to the new genus. Neither did Berthold (1827, Latreille's *Natürl. Fam. Thierr.*: 271), who remarked "das Geschlecht *Coronis* ist auf *Squilla Eusebia* von Risso, oder auf eine sehr nahe stehende Art gegründet". The first species definitely assigned to *Coronis* is *Coronis scolopendra* Latreille (1828, *Encycl. method. Hist. nat.* (Ins.) 10 : 474) which consequently is its type-species.

7. All Stomatopod genera considered in the present proposal are currently considered to belong to the family Squillidae. Though the generic name *Squilla* Fabricius, 1787, has been placed on the Official List of Generic Names in Zoology, the family name Squillidae has not yet been inserted in the Official List of Family-Group Names in Zoology. Therefore this opportunity is taken to request the Commission to enter the name Squillidae on the appropriate list.

8. The concrete proposals which we now submit for consideration to the International Commission on Zoological Nomenclature are that they should:

(1) make use of their plenary powers:

- (a) to suppress for the purposes of the Law of Priority, but not for those of the Law of Homonymy, the generic name *Smerdis* Leach, 1817, *Tuckey's Narrat. Exped. River Zaire* (app. 4): unnumbered pl. (type-species, by present selection: *Smerdis vulgaris* Leach, 1817, *Tuckey's Narrat. Exped. River Zaire* (app. 4): unnumbered pl.);
- (b) to set aside all designations or selections of type-species for the genus *Pseudosquilla* Dana, 1852, *U.S. Explor. Exped.* 13 : 615, 621, made prior to the proposed ruling, and having done so
- (c) to designate as the type-species of that genus *Squilla ciliata* Fabricius, 1787, *Mant. Ins.* 1 : 333;
- (d) to set aside all designations or selections of type-species for the genus *Gonodactylus* Berthold, 1827, Latreille's *Natürl. Fam. Thierr.* : 271, made prior to the proposed ruling, and having done so
- (e) to designate as the type-species of that genus *Squilla chiragra* Fabricius, 1781, *Spec. Ins.* 1 : 515;

(2) place on the Official List of Generic Names in Zoology the following names:

- (a) *Coronida* Brooks, 1886, *Johns Hopk. Univ. Circ.*, 5 (49) : 84 (a genus described without originally included nominal species; type-species, by selection by Balss, 1938, Bronn's *Klassen u. Ord. Tierr.*, 5 (1) (6) (2) : 130 : *Squilla bradyi* A. Milne Edwards, 1869, De Folin & Périer's *Fonds de la Mer* 1 : 137) (gender: feminine);
- (b) *Coronis* Desmarest, 1823, *Dict. Sci. nat.* 28 : 345 (type-species by subsequent monotypy: *Coronis scolopendra* Latreille, 1828, *Encycl. method. Hist. nat.* (Ins.) 10 : 474) (gender: feminine);

- (c) *Gonodactylus* Berthold, 1827, Latreille's *Natürl. Fam. Thierr.*: 271 (type-species, designated under the plenary powers under (1) (e) above: *Squilla chiragra* Fabricius, 1781, *Spec. Ins.* 1:515) (gender: masculine);
 - (d) *Hemisquilla* Hansen, 1895, *Ergebn. Plankton-Exped.* 2 (G) (c) : 72 (type-species, by monotypy: *Gonodactylus styliferus* H. Milne Edwards, 1837, *Hist. nat. Crust.*, 2 : 530 [Note (not for inclusion in the Official List): This specific name is a subjective synonym of *Gonodactylus ensiger* Owen, 1832, *Proc. zool. Soc. London* 1832 : 6]) (gender: feminine);
 - (e) *Pseudosquilla* Dana, 1852, *U.S. Explor. Exped.* 13 : 615, 621 (type-species, designated under the plenary powers under (1) (c) above: *Squilla ciliata* Fabricius, 1787, *Mant. Ins.* 1 : 333) (gender: feminine);
- (3) place on the Official List of Specific Names in Zoology the following names:
- (a) *bradyi* A. Milne Edwards, 1869, as published in the combination *Squilla bradyi*, being the name of the type-species of the genus *Coronida* Brooks, 1886;
 - (b) *chiragra* Fabricius, 1781, as published in the combination *Squilla chiragra*, being the name of the type-species of the genus *Gonodactylus* Berthold, 1827, as designated under (1) (e) above;
 - (c) *ciliata* Fabricius, 1787, as published in the combination *Squilla ciliata*, being the name of the type-species of the genus *Pseudosquilla* as designated under the plenary powers under (1) (c) above;
 - (d) *ensiger* Owen, 1832, as published in the combination *Gonodactylus ensiger*, [being the valid name of the type-species of the genus *Hemisquilla* Hansen, 1895];
 - (e) *scolopendra* Latreille, 1828, as published in the combination *Coronis scolopendra*, being the name of the type-species of the genus *Coronis* Desmarest, 1823;
- (4) place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
- (a) *Coroniderichthus* Hansen, 1895, *Ergebn. Plankton-Exped.* 2 (G) (c) : 81, 83, 98, 102 (type-species by present selection: *Squilla bradyi* A. Milne Edwards, 1869, De Folin & Périer's *Fonds de la Mer* 1 : 137), an objective junior synonym of *Coronida* Brooks, 1886;
 - (b) *Coronis* Huebner, 1823 (21 December), *Verz. bekannt. Schmett.* (17) : 265 (type-species by monotypy: *Coronis stollii* Huebner, 1823, *Verz. bekannt. Schmett.* (17) : 265) a junior homonym of *Coronis* Desmarest, 1823 (September).
 - (c) *Gonerichthus* Brooks, 1886, *Johns Hopk. Univ. Circ.*, 5 (49) : 83 (a genus described without originally included nominal species; type-species, by present selection: *Squilla chiragra* Fabricius, 1781, *Spec. Ins.* 1 : 515) (an objective junior synonym of *Gonodactylus* Berthold, 1827);
 - (d) *Pseuderichthus* Brooks, 1886 (May), *Johns Hopk. Univ. Circ.*, 5 (49) : 83 (a genus described without originally included nominal

- species; type-species, by selection by Manning (1963, *Bull. Mar. Sci. Gulf Carib.*, **13** (2) : 310) from among the species placed in the genus by the first subsequent author (Hansen, 1895, *Ergebn. Plankton-Exped.* **2** (G) (c): 69, 84, 86): *Squilla ciliata* Fabricius 1787, *Mant. Ins.* **1** : 333) (an objective junior synonym of *Pseudosquilla* Dana, 1852);
- (e) *Pseudosquilla* Eydoux & Souleyet, 1842, *Voy. Bonite* (Zool.) **1** (2): 263 (a vernacular (French) name);
- (f) *Pseuderichthus* Dames, 1886 (after September), *Zeitschr. Deutsch. geol. Ges.* **38** : 571 (type-species, by monotypy, *Pseuderichthus cretaceus* Dames, 1886, *Zeitschr. Deutsch. geol. Ges.* **38** : 571), a junior homonym of *Pseuderichthus* Brooks, 1886;
- (g) *Alimerichthus* Claus, 1871, *Abh. Ges. Wiss. Göttingen* **16** : 146 (type-species, by present selection, *Alimerichthus pyramidalis* Lanchester, 1903, in Gardiner, J. S., *Fauna and Geography of the Maldives and Laccadive Archipelagoes* **1** (4) : 457), a junior homonym of *Alimerichthus* Guérin, 1855;
- (h) *Smerdis* Leach, 1817, *Tuckey's Narrat. Exped. River Zaire* (app. 4) : unnumbered pl. (as suppressed under the plenary powers in (1) (a) above);
- (5) place on the Official List of Family Group Names in Zoology the name SQUILLIDAE (correction of SQUILLARES by White, 1847, *List Crust. Brit. Mus.* : 83) Latreille, [1802-1803], *Hist. nat. Crust. Ins.* **3** : 36 (type-genus *Squilla* Fabricius, 1787).